

Appl. No. 09/771,977  
Amdt. Dated December 3, 2003  
Reply to Office action of September 16, 2003  
Attorney Docket No. P12291-US1  
EUS/J/P/03-2017

### **REMARKS/ARGUMENTS**

#### **1.) Amendments**

Claims 1 and 3 have been amended. Claims 1-30 remain pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

#### **2.) Examiner Objections**

The Examiner objected to claims 8-9 and 24 as being dependent upon a rejected base claim, but indicated such claims would be allowable if rewritten in independent form, including all of the limitations of the respective base claims and any intervening claims. The Applicant thanks the Examiner for indicating that such claims would be allowable but, because the respective base claims are allowable over the cited references, the Applicant declines to so amend claims 8-9 and 24.

#### **3.) Claim Rejections – 35 U.S.C. §102(b)**

The Examiner rejected Claims 1-7, 10, 11-13, 14, 18, 20-23, 25 and 29 as being anticipated by United States Patent No. 4,031,469, issued to Johnson. Whereas Johnson fails to disclose each and every limitation recited in those claims, the Applicant traverses the rejection.

Claim 1 recites:

1. A method for calibrating one or more amplifiers (100,200) comprising the steps of:
  - i) generating a noise signal ( $N_s+N_i$ ) produced by said one or more amplifiers (100,200) when no input signal ( $S_i+N_i$ ) is connected

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(Alt 2) to at least one amplifier of said one or more amplifiers (100,200); and

ii) using said noise signal ( $N_a + N_i$ ) as a calibrating signal for estimating a corresponding gain ( $G$ ) of said one or more amplifiers (100,200) by measuring (600) at at least one output of said one or more amplifiers (100,200) the amount of noise ( $S_{tot}$ ) of said one or more amplifiers (100,200). (emphasis added)

The Applicant's invention utilizes a signal generated by one or more amplifiers themselves as a reference signal to calibrate the gain of the amplifiers.

In contrast to Applicant's invention, Johnson utilizes the signal from an oscillator to calibrate the amplifier gain. As shown in Figure 2 of Johnson, a 400 MHz oscillator 62 is coupled to the amplifier by switch 66 when the receiver is placed in calibrate mode (via switches 64, 46 and 66). Thus, Johnson does not disclose using a signal generated by one or more amplifiers themselves, such as an amplifier's inherent noise signal, as a reference signal to calibrate the gain of the amplifiers. Therefore, Johnson fails to anticipate claim 1.

Whereas Independent claims 3, 5, 6 and 20 recites limitations analogous to those of claim 1, Johnson also fails to anticipate those claims. Furthermore, whereas claim 2 is dependent from claim 1; claim 4 is dependent from claim 3; claims 7, 10, 12-13 and 18 are dependent from claim 5; claims 11 and 14 are dependent from claim 6; and claims 21-23, 25 and 29 are dependent from claim 20, and include the limitations of their respective base claims, those claims are also not anticipated by Johnson. The Applicant, therefore, respectfully requests that the Examiner withdraw the rejection of claims 1-7, 10, 11-13, 14, 18, 20-23, 25 and 29 as being anticipated by Johnson.

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**4.) Claim Rejections – 35 U.S.C. §103(a)**

The Examiner rejected claims 15-17, 19, 26-28 and 30 as being unpatentable (obvious) over Johnson in view of Logan, *et al.* (U.S. Patent No. 4,521,861).<sup>1</sup> The Applicant traverses the rejection of those claims as being obvious.

As established *supra*, claims 7 and 20 are not anticipated by Johnson. Logan fails to cure the deficiencies of Johnson; *i.e.*, Logan also does not disclose using a signal generated by one or more amplifiers themselves, such as an amplifier's inherent noise signal, as a reference signal to calibrate the gain of the amplifiers. Therefore, claims 7 and 20 are not obvious over Johnson in view of Logan. Whereas claims 15-17 and 19 are dependent from claim 7, and claims 26-28 and 30 are dependent from Claim 20, those claims are also not obvious over Johnson in view of Logan. The Applicant, therefore, respectfully requests that the Examiner withdraw the rejection of claims 15-17, 19, 26-28 and 30.

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<sup>1</sup> The Detailed Office Action states that Claims 13 and 25 were also rejected under Section 103, but no reasons were provided by the Examiner for the rejection of those claims. Whereas those claims were also rejected under Section 102, the Applicant has not addressed the stated rejection under Section 103.

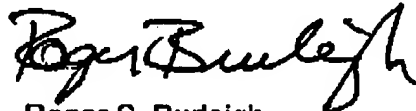
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### CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all objections and rejections and issue a Notice of Allowance for Claims 1-30.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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